



April 24, 2000

**ECD Receives Air Force  
Contract to Further Advance  
Its PV Space Products  
Technology**

04/24/00

TROY, Mich., April 24 /PRNewswire/ -- Energy Conversion Devices, Inc. (ECD)(Nasdaq: ENER) announced today that it has been awarded a new \$750,000 two-year cost-sharing contract by the U.S. Air Force to further advance its proprietary photovoltaic (PV) space technology. United Solar Systems Corp. (United Solar), ECD's PV manufacturing joint venture with N.V. Bekaert S.A. (Bekaert), will work with ECD in fulfillment of the contract.

ECD and United Solar have developed a unique technology to manufacture high-efficiency amorphous silicon alloy solar modules. The products manufactured by United Solar are lightweight, radiation hard and perform well at high temperatures. These features make amorphous silicon alloy solar cells ideal for space applications.

This award is the result of a successful Phase I contract with the U.S. Air Force. Under this contract, United Solar and ECD will develop laser- integrated ultralight, thin-film amorphous silicon-based solar panels on Kapton(R), a lightweight, 1 to 2 mil thick plastic substrate, for auxiliary spacecraft power systems. The technology being developed is capable of providing 2,500 watts per kilogram, which is dramatically higher than 30-50 watts per kilogram currently available. This will offer immediate savings given launch cost of approximately \$10,000 per pound, resulting in approximately

one-half million dollars in savings per satellite.

There is a growing need for low-cost and lightweight solar cells for the large number of satellites that will be launched during the next five years to facilitate commercial growth for faster global access to telecommunications, Internet and video phones. For many years, satellites have used crystalline silicon or gallium arsenide solar cells to generate power, but these cells are expensive, fragile and significantly heavier than United Solar's thin-film cells.

NASA has confirmed that the total area efficiency of United Solar's cells is 12 percent under AM0 solar illumination present in space. United Solar has demonstrated the radiation hardness and superior high temperature properties of its cells, which are able to retain more power than conventional crystalline cells under operating conditions prevalent in space. The cells also have gone through thousands of thermal cycles under space conditions. United Solar modules have been on the MIR Space Station since November 1998, where they are demonstrating reliable space performance without any degradation.

Earlier this month, ECD and United Solar announced a strategic alliance with Bekaert which provides for an investment by Bekaert of \$84 million to expand United Solar's manufacturing capacity with the construction of 25 megawatt annual capacity plant to be designed and built by ECD. United Solar plans to embark upon a sales and marketing expansion program which will include a wide variety of products for both terrestrial and space application.

United Solar is the world leader in thin-film amorphous photovoltaics. ECD and United Solar have pioneered, developed and hold basic patents covering the continuous roll-to-roll manufacturing of thin-film amorphous silicon alloy multi-junction solar cells and related products, including flexible solar battery chargers, framed power modules, Uni-Kit Lighting Systems and UNI- SOLAR7 Roofing Shingles and Metal Roofing Panels. These unique products are flexible, rugged and lightweight and offer significant advantages over

conventional solar panels in providing more energy per rated watt under normal outdoor conditions.

Bekaert, the worldwide leading manufacturer of steel wire, steel wire products and steel cord, is a fast-growing manufacturer of advanced materials. Its market and technological leadership is based on metal-forming and a wide range of coating technologies. Bekaert is a worldwide company with over 70 production centers and a workforce of 17,000 people.

ECD is a leader in the synthesis of new materials and the development of advanced production technology and innovative products. It has pioneered and developed enabling technologies leading to new products and production processes based on amorphous, disordered and related materials, with an emphasis on alternative energy and advanced information technologies. ECD's web site address is <http://www.ovonic.com> .

This release may contain forward-looking statements within the meaning of the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements are based on assumptions which ECD, as of the date of this release, believes to be reasonable and appropriate. ECD cautions, however, that the actual facts and conditions that may exist in the future could vary materially from the assumed facts and conditions upon which such forward-looking statements are based.